

### REMARKS

This Amendment, submitted in response to the Office Action dated June 25, 2008, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested

#### **1. Summary of Office Action**

Claims 1, 6-9, 14-17, 19, 21, 22, 25, 26, 28, 30, 31, 34-37, 40, and 41 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Budnikov (US 2003/0215013) in view of Davidson (US 5,394,473).

Claims 2, 10, 20, and 29 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Budnikov in view of Davidson as applied to claim 1 and in further view of Li (US 2003/0187634).

Claims 3, 11, 23, 32, and 37 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Budnikov in view of Davidson and Li and in further view of Chen et al. (US 2003/0115042; hereafter “Chen”).

Claims 4, 5, 12, 13, 24, 33, 38, and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **2. Prior Art Rejection under 35 U.S.C. § 103(a)**

With respect to claim 1, the Examiner asserts that Budnikov fails to disclose, but Davidson (col. 21 lines 5-23) teaches operation (d) of the claimed method. Operation (d) is as follows:

- (d) performing a psychoacoustic model analysis, by using the generated CMDCT spectrum and FFT spectrum.

Davidson is directed to audio encoding, and discloses performing an evenly-stacked time-domain aliasing cancellation (E-TDAC) transform at the filter bank 116 (Fig. 1a) to select an analysis window (col. 18 line 53 through col. 21 line 63). In this respect, the Examiner asserts that Davidson discloses that a fast Fourier transform (FFT) and a complicated modified discrete

cosine transform (CMDCT) are concurrently performed to select a window type. Unlike the Examiner's assertion, however, Davidson only discloses that an FFT is used to perform a modified discrete cosine transform (MDCT) concurrently with a modified discrete sine transform (MDST). In other words, Davidson only teaches that, assuming *arguendo* that Davidson's MDCT corresponds to the CMDCT of the claim, an FFT is used as a method of performing an MDCT. This teaching does not correspond to two independent operations, that is, generating an FFT spectrum and generating a CMDCT spectrum. Also, it is notable that col. 21 lines 9-13 and lines 25-26 disclose that two concurrently performed operations are not an MDCT and an FFT but an MDCT and an MDST. Thus, the transforms performed by the filter bank 116 in Davidson do not teach or suggest the CMDCT and the FFT of the claimed method.

In addition, the claimed method indicates that a window type is first determined and subsequently used to perform the CMDCT and the FFT while Davidson discloses performing an MDCT and an MDST concurrently in order to determine a window type for a following step. Thus, even if the Examiners' assertion that an MDCT and an FFT are performed concurrently is not erroneous, this concurrent performing does not correspond to the performing a CMDCT and an FFT (using a determined window type) to perform a psychoacoustic model analysis.

In the meantime, the Examiner asserts that since Davidson teaches using both a CMDCT and an FFT for performing a psychoacoustic analysis, this teaching can be applied to Budnikov so that both the CMDCT and the FFT are used to select a window type. Considering, however, that an FFT is known to transform a signal representation from a time domain to a frequency domain for analyzing the signal, there is no reason for one of ordinary skill in the art to combine the time-to-frequency transformation disclosed in Davidson with Budnikov to achieve the claimed invention. This is because Budnikov does not need such transformation because this reference is provided to introduce adaptive grouping of short windows which is possible only by analyzing signal characteristics at a time domain as shown in Figs. 7-10. In this regard, combination of Davidson with Budnikov serves only to impermissibly change the principle of operation of the prior art invention being modified, i.e., Budnikov, which proves that the teachings of the references are not sufficient to render the claims *prima facie* obvious. See *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Thus, Applicant respectfully submits that the claim 1, corresponding apparatus claim 9 and computer-related claim 35 would not have been rendered obvious over Budnikov in view of Davidson.

Claims 2, 3, 6-8, 10, 11, 14-16, 36-37 and 40-41 should be allowable at least due to their dependencies and additionally recited elements.

With respect to method claim 17 and corresponding apparatus claim 26, the Examiner iterates the same assertions made to reject claims 1 and 9, which cannot be a basis for rejecting different claims.

For example, the claims should be allowable because none of Budnikov and Davidson teaches or suggests that both a long CMDCT spectrum and a short CMDCT spectrum are generated by applying a long window and a short window to the input audio signal, and the CMDCT by applying the long window and the CMDCT by applying the short window are performed at the same time. Further, the Examiner has failed to show how the aforementioned claim features are disclosed in Budnikov and Davison.

Thus, claims 17 and 26 should be allowable over the references.

Claims 19-23, 15, 18-32 and 34 should be allowable at least due to their dependencies and additionally recited elements.

## **2. Allowable Subject Matter**

Applicant respectfully requests the Examiner to hold in abeyance rewriting of these claims until merits of the rejected claims have been reconsidered.

## **3. New Claims**

Applicant adds new claim 44 to more fully cover the present application based on the original disclosure.

## **4. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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